AMENDMENTS TO THE CLAIMS:

The following listing of claims supersedes all prior versions and listings of claims in this application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of identifying conflicts in a set of system operating rules, said method comprising using at least one programmed computer having input/output ports, memory and a processor to:

a) store rule data representing a set of one or more system operating rules, each system operating rule comprising at least one system command identified by a system command portion;

b) receive semantic data representing a graph structure of hierarchical semantic relationships between available system commands, including those in the set of system operating rules;

c) expand the system operating rules according to the allowable hierarchical semantic relationships between the available system command portions, to give, for any particular system operating rule, an additional system operating rule for each hierarchical semantic level in the graph structure below the system command present in the particular system operating rule;

d) compare the expanded system operating rules to identify those system operating rules for which a semantic conflict occurs therebetween; and

e) output data representing the identified conflicts to a user and/or another computer-implemented process.

2. (Previously Presented) A method according to claim 1, wherein:

each stored system operating rule data comprises a subject portion identifying one or more system users, the system command portion identifying the system command to which the system operating rule relates, and an object portion identifying one or more system objects to which the system operating rule applies; and

when any of the system operating rules identify more than one system user in the subject portion, and/or more than one system object in the object portion, then expanding such system operating rules to produce replacement system operating rules having a single system user in the subject portion, and a single system object in the object portion, said replacement system operating rules being produced before the expansion step c) is performed.

3. (Previously Presented) A method according to claim 1, wherein each stored system operating rule further comprises a positive indication portion, which indicates

whether the system operating rule is to be applied positively or negatively, the method further comprising:

f) resolving any identified conflicts in the expanded set of system operating rules to output a resolved expanded set of system operating rules; and

g) producing from the semantic data a second graph structure corresponding to the mirror image of the hierarchical semantic relationships between the available system commands, and

wherein the expanding step c) uses the hierarchical semantic relationships of the second graph structure to expand any system operating rules for which the positive indication portion thereof indicates are to be applied negatively.

4. (Previously Presented) A method according to claim 1 of identifying conflicts in an initial set of system operating rules, wherein said method further comprises generating a set of system operating rules by:

f) resolving any identified conflicts in the expanded set of system operating rules to give a resolved expanded set of system operating rules.

5. (Previously Presented) A method of identifying conflicts in a set of system operating rules, said method comprising using at least one programmed computer having input/output ports, memory and a processor to:

a) store system operating rule data representing a set of one or more system operating rules, each system operating rule comprising at least one system command identified by a system command portion;

b) receive semantic data representing a graph structure of hierarchical semantic relationships between available system commands, including those in the set of system operating rules;

c) expand the system operating rules according to the allowable hierarchical semantic relationships between the available system command portions, to give, for any particular system operating rule, an additional system operating rule for each hierarchical semantic level in the graph structure below the system command present in the particular system operating rule;

d) compare the expanded system rules to identify those system operating rules for which a semantic conflict occurs therebetween;

e) resolve any identified conflicts in the expanded set of system operating rules to give a resolved expanded set of system operating rules;

f) reduce the resolved expanded set of system operating rules to canonical form to give an optimized set of system operating rules; and

g) outputting said optimized set of system operating rules.

6. (Previously Presented) A method as in claim 4 further comprising operating a system applying the output optimized set of system operating rules in its operation.

7. (Previously Presented) A computer storage medium containing a computer program or suite of programs which, when executed by a computer, causes the computer to perform the method of claim 1.

8. (Cancelled)

9. (Previously Presented) A system for identifying conflicts in a set of system operating rules, said system comprising at least one programmed computer having input/output ports, memory and a processor, said system providing:

a) storage means for storing system operating rule data representing a set of one or more system operating rules, each system operating rule comprising at least one system command;

b) data receiving means for receiving semantic data representing a graph structure of hierarchical semantic relationships between available system commands, including those in the set of system operating rules; and

c) processing means operable to:

c1) expand the system operating rules according to the allowable hierarchical semantic relationships between the available system command portions, to give, for any particular system operating rule, an additional system operating rule for each hierarchical semantic level in the graph structure below the system command present in the particular system operating rule;

c2) compare the expanded system operating rules to identify those system operating rules for which a semantic conflict occurs therebetween; and

d) output means for outputting data representing the identified conflicts to a user and/or another computer-implemented process.

10. (Previously Presented) A system according to claim 9, wherein:

each stored system operating rule data comprises a subject portion identifying one or more system users, a system command portion identifying the system command to which the system operating rule relates, and an object portion identifying one or more system objects to which the system operating rule applies; and

when any of the system operating rules identify more than one system users in the subject portion, and/or more than one system objects in the object portion, then the processing means expands such system operating rules to produce replacement system operating rules having a single system user in the subject portion, and a single system object in the object portion.

11. (Currently Amended) A system according to claim 9, wherein:

each stored system operating rule further comprises a positive indication portion, which indicates whether the system operating rule is to be applied positively or negatively; and[[:]]

the processing means is further operable to: (i) produce from the semantic data a second graph structure corresponding to the mirror image of the hierarchical semantic relationships between the available system commands; and (ii) to use the hierarchical semantic relationships of the second graph structure to expand any system operating rules for which the positive indication portion thereof indicates are to be applied negatively.

12. (Previously Presented) A system according to claim 9 for identifying conflicts in a set of system operating rules further comprising means for generating an optimized set of system operating rules from a set of system operating rules by resolving any identified conflicts in the expanded set of system operating rules to give a resolved expanded set of system operating rules.

13. (Previously Presented) A system according to claim 12, wherein the processing means also reduces the resolved expanded set of system operating rules to canonical form to give an optimized set of system operating rules.

14. (Previously Presented) A system as in claim 12, which operates in accordance with the resolved set of system operating rules.

15. (Previously Presented) A system as in claim 13, which operates in accordance with the optimized set of system operating rules.